

Royal Family," "The Corporations of Manchester and Salford," "The Bridge Committee," "The Boroughreeves of Manchester and Salford," "The Bridgemaster," "The Towns and Trade of Manchester and Salford."

These sentiments were loudly cheered and severally responded to by the Mayors of Manchester and Salford, Mr. Brotherton, Mr. Addison, and Mr. Woolam.

At the close of the ceremony the authorities and gentlemen again formed themselves into procession, and proceeded to their respective Town Halls, where they separated.

Immediately after the departure of the authorities, a large number of coaches, carts, waggon, &c., loaded with people, passed over the bridge, amidst the cheers of the multitude assembled.—*Herald.*

MONUMENT TO LORD COLLINGWOOD.

It affords us pleasure to learn that the committee of the subscribers to the monument proposed to be erected to the memory of the late Vice-Admiral Cuthbert Lord Collingwood have resolved upon completing the undertaking with all convenient speed, in reliance on the public for the inconsiderable amount of money yet deficient. Although no subscription list has for some time been advertised, and but little publicity given of late to the proceedings that have taken place, it appears that upwards of 2,000*l.* have been already placed at the disposal of the committee, and it is calculated that another 1,000*l.* will be amply sufficient to finish the work in a style befitting the character of the illustrious individual, the renown of whose brilliant actions it is designed to perpetuate and extend. The architectural design is by Mr. Dobson, and the execution of the colossal figure has been intrusted to Mr. Lough, a native artist, who has had the honour of being selected by Royal patronage to chisel the bust of her Majesty, to be placed in the niche above the entrance of the Royal Exchange, in London. It was at one time contemplated to place the monument in the Castle-yard at Tynemouth, but a much more eligible site has since been fixed upon, near to the entrance of the river, the requisite ground having been generously given by the Duke of Northumberland, in addition to his Grace's noble donation of 500*l.* It will form a striking object to mariners navigating our coast, and the land immediately surrounding it will be laid out as pleasure-grounds, with public walks.—*Newcastle Journal.*

TIMBER—ITS TREATMENT AND USES.

BY JAMES WILSON.
(Continued from p. 483.)

96. **ASH.**—This tree, the "Venus of the Forest," is a native of Europe and the northern parts of Asia, and abounds in Great Britain: it is a forest-tree of the first class, both in beauty and magnitude, yielding to the oak in girth of trunk and in circumference, but frequently over-topping it in height. Being prolific in ripening its winged seeds, it disperses itself on the winds pretty generally over the face of the British Isles; and is frequently found adorning the crumbling ruins of ancient buildings, beautifying, while, by the sinuosities of root and branch, amongst cracks and crevices, it hastens the period of their downfall: it also places its bright verdure in contrast with the arid and sterile aspect of loose and slaty rocks, where, especially in mountain-scenery, it appears to peculiar advantage, waving its slender and graceful foliage over precipices, or from inaccessible clefts, affording it the scantiest foothold. It is, nevertheless, much better when planted by itself for timber or underwood, and should neither be permitted a place in hedge-rows nor on pasture lands, for its numerous roots spread widely on the surface, engrossing the nutritive moisture within its reach, to the total deprivation and consequent destruction of surface-plants. It is rapid in growth and of a towering nature, capable of attaining, on rich gravelly loam, a diameter of four or five feet; but trees of even less than this bulk are often found to have begun to rot at the core, and it is therefore seldom allowed to arrive at full maturity; besides which, the circumstance of the young being in fact more valuable than the old wood, conduces, with its extreme usefulness for many purposes, to its being made available at a more early age: it rarely lives

to 500, and the age for felling is between 50 and 100 years,—the season, winter, when the sap is still, it being very liable to worms if felled when abounding in sap.

97. The quality of the timber is very much dependant on the situation and soil on which it is raised: it delights to grow in the woods, but will, on good soils, flourish in open grounds; and a clayey soil and northern exposure seem to be the most proper for producing it in perfection. Its general form and appearance too are determined by these circumstances; for it is found that when grown singly or unconfin'd, its leading stem not only shoots up, but throws out, at acute angles, numerous side branches, which, when advanced in age and increased in foliage, take that graceful sweep that obtains for the tree, when full-grown, so much admiration: when planted on the margin of some lake or stream, they take so much of this elegant pendent character, as to acquire a resemblance to the weeping willow. Its foliage consists of light, thin, pale-green pendent leaves, generally winged—having an odd one at the end, with five or six pairs of small ones; the seed-bud, which is oval and compressed, changes into a long membranaceous vessel, containing a single seed; many trees produce profusely bunches of long thin seeds, called keys, giving a singular and not unpleasing appearance, whilst others have hardly any. It is one of the latest trees in donning its vesture of green, and amongst the first to relinquish its leafy honours to the nipping influence of autumn winds. The seeds should be gathered in autumn, and the sowing in the nursery-beds may either be done immediately, or deferred till spring. When the seedlings are five or six inches high, they should be planted out in rows, to strengthen, until finally transplanted. In order to raise timber of the best quality, a piece of land, of the nature already referred to, should be thickly sown or planted—by placing the trees about two feet apart: when these have risen (which they do rapidly) and appear to be choking each other, one-half of the poles should be withdrawn, and the remainder left to attain a marketable growth of from 40 to 60 feet in height and from 8 to 12 inches diameter.

98. Besides the common ash here treated of, there are other species in America and elsewhere. There is a variety, indigenous to Italy and abundant in Calabria, grown in England, seldom exceeding 20 feet in height, which, as well as another, we believe, furnishes the honey-like concreted juice or gum called manna, that is given to infants and young children as a mild aperient. This production, which is of a granular form, about the size of coriander seeds, and of a brownish white in colour, has a sweetness and a degree of sharpness which render it agreeable. In heats, unaccompanied by rain, towards the end of July, it is obtained by slitting the stem of the tree horizontally, when the liquid gum exudes from the wound and is conveyed from it by straws, or the foot-stalks of the leaves, and received in cups formed of leaves of the maple; this exusion continues for about a month. Besides this, there are several others, one of which, a variety of the common ash, is the creeping-branched, and forms, by engraving high on the tall stem of the common ash, a rather ornamental weeping tree; others are the yellow-barked, curled-leaved, and various-leaved, with many more which are exotics. Very interesting results have been obtained by grafting the common and Persian lilacs on the common ash; and it has been suggested that the pendulous ash would form a beautiful object having its branches grafted with the Persian species. The scions are recommended to be taken off in January or February.

99. The mountain-ash, fowler's service-tree, witch-wood, or rowan, though of the smaller class, is yet an interesting object and worthy of notice. It is very common throughout Britain, particularly in mountainous districts; in the wild and rugged scenery of the Scottish Highlands, many picturesque specimens are seen, and it imparts to woodland and suburban gardens an equal beauty, whether in spring, when bearing its cream-white and sweetly-scented flowers, or in autumn, loaded with its coral-red clusters of berries. It has much of the graceful pendent tendency of its species, with elongated branches drooping under their light and lively verdure. Superstition invested the rowan tree with a mysterious and preternatural character,

but intelligence is fast dispelling it, averting the "evil eye" which its potency was wont to cope with. It is raised from berries, which may either be sown immediately they are ripe, or kept till spring in some cool place, amongst sand. The wood is, from its comparative smallness, seldom made available for purposes of manufacture; but it is good in quality, fine-grained, hard, and susceptible of a high polish, and on these accounts is used by the turner, and for the handles of cutlery and for other small purposes. It is likewise employed in the manufacture of crates, baskets, and hoops, and makes capital poles.

100. In the common ash, the wood of young trees is, in colour, a brownish white, with an inclination to green; that of old trees is something like oak, but more streaked with dark veins; the annual rings are very distinct, being porous in one part and compact and darker in the other: there are no larger transverse septa, and therefore no flowers. The substance and quality of the wood are pretty uniform throughout, but the outer part is, in some degree, the toughest: that in which the fibre is straightest is generally accounted the best. It is difficult to work, particularly the young wood, which exceeds the old in toughness, and, indeed, is tougher and stronger than oak; the old wood has a tendency to brittleness; the wood is tasteless and inodorous.

101. With respect to seasoning, it must be observed that the ash loses substance and weight by long-steeping in cold water; but, for timber that has been felled in spring (in which, it may be remarked, the pores have a reddish tinge) water seasoning is very beneficial. In consequence of its great toughness and elasticity, wherein it excels every other British timber, and which render it valuable for purposes where great strains and sudden shocks have to be sustained, it is very extensively used both by the coach-maker and cartwright in making vehicles of conveyance, also for machines, ploughs, and other implements of husbandry, dairy utensils, turnery, tackle-blocks, &c., for which no wood is better adapted; and although very subject to rot when at rest and exposed to the vicissitudes of the weather, it will, when applied as above, kept in constant use, and taken proper care of, last a very long period: it is only in peculiar cases that it can be introduced in buildings, and then there should be facilities for its replacement in case of decay. It is too flexible for posts, and beams, but ought to be useful for ties; though tolerably durable, however, when kept dry, it is not sufficiently so for the general purposes of the house-carpenter.

102. We have now, in the description of timber-trees, reached the limit to which, in the opening of our subject, we promised to confine our attention; namely, the consideration of such only as were within the meaning of the term "building-materials:" but there are, besides those described, so many trees which, either from their actual use in the more ornamental or in the minor purposes of building, or their eligibility for being so applied, are objects of more than mere passing interest, that we need scarcely apologize for touching on them. Accordingly, before passing to the next stage of the subject in hand, we proceed to notice the leading features of some of them, whether or not yet introduced into the British Sylva.

103. **Yew.** This tree is believed to be the most ancient in Great Britain; indeed, there appears reason to think that it is, of all European trees, the one capable of attaining the greatest age: there are now individual examples in England respecting which no doubt can exist of their having been trees at the Christian era, and at least one that has considerably exceeded 3,000 years. This tree is in full health, and is perhaps the most ancient specimen of vegetation in Europe; it is also of remarkable magnitude, being about 27 feet in diameter. The yew is indigenous to Britain, grows naturally in many parts both of England and Scotland, and is hardy enough to endure the inclemencies of our severest seasons: it is most frequently grown as an ornamental shrub, and is valuable where sheltered by surrounding trees as an underwood, shooting up more rapidly and with a cleaner stem than when grown alone. Its dark foliage affords an advantageous contrast to trees of a livelier character; it has also much beauty of its own, being indeed considered by some as one of the most beautiful of our evergreens: during its growth, and till